CS5/7319- Software Architecture and Design Project Proposal Guideline (2 Points)

On Campus and Off Campus Due Date: 11:59pm on March 4, 2024

Note: This is a team project. A project team can be formed by at least 2 and at most 3 students. Each student is required to sign up for a project team on Canvas by the Project Team Sign-up due date! All students in the same project team will receive the same grade. You may not switch your team after the Project Team Sign-up due date.

Maximum 15 pages (Times 11 point Fonts and Single Line Space) describing <u>who</u>, <u>what</u>, <u>how</u>, <u>why</u>, <u>how much</u> you plan to do on this project)

Submission: Upload both PDF and Word documents onto Canvas via "Project Proposal" submission link by the indicated due date and time. Grading is based on the PDF file. If needed, we might need to check your Word file.

Project Title:

[This will be used to identify your team during the presentation. Keep it as short as a few words.]

Project Team Information:

Who will submit the Project Proposal and Final Project Deliverables?

You must indicate a team leader who will be responsible for submitting the Project Proposal and Final Project Deliverables. You cannot change the submitter for your team project after the Project Proposal's due date.

Project Overview:

- 1. Describe the main capabilities of your software system.
- 2. Describe the expected user interactions, behaviors, outputs, and results of your software system.
- 3. Prototyping Interfaces:

[*Give snapshots of your project prototype. When you submit this proposal, you should have some static prototyping interfaces to demonstrate your project. Keep your interfaces simple and intuitive.*]

Note that you probably want to put 1, 2 and 3 together to show each prototyping interface in parallel with the textual description of each capability, user interaction, behavior, and the outputs/results of your software system.

Project Design:

- 1. Select two different architectural styles to design, compare, and evaluate.
- 2. Architecture Diagrams: [Draw two high-level architecture diagrams of your system, one for each architecture design, showing the components and connectors in each architecture.]
- 3. Finally, choose the most suitable architecture to design and develop your project. Please provide the rationale for your selection.

Project Implementation Plan:

Provide two project implementation plans for **both selected architecture options.** [*Explain the platform you will use to implement your system, e.g., Java, Eclipse, Microsoft Visual Studio, C, C++, C#, Python, Xcode, ...]*

Project Members' Roles and Responsibilities

[Describe each team member's responsibilities and tasks in the project.]